Claim 20 is directed to a package for an optical detector including a plastic window portion of the housing; and a protective coating on the window portion permitting transmission of light of a wavelength of around 400 nanometers through the window portion without conversion while protecting the window portion from deterioration.

Claim 15 is directed to an integrated circuit including a semiconductor chip including a light sensitive device; a transparent plastic layer over the light sensitive device; and a protective coating on the plastic layer selected from silicon oxide and aluminum nitrate which permits transmission of light n without conversion.

To begin with, the Reeh et al. references discloses a light-radiating semiconductor component with a luminescent conversion element (the title of the patent). The present invention is directed specifically to a light detector. The light detector does not include an element which is a luminescence conversion element. The semiconductor body 1 which includes a light emitting diode is encapsulated in a luminescence conversion encapsulation 5 in Figure 1 or includes a luminescence conversion layer 4 in Figures 2-4. The luminescence conversion encapsulation 5 and the luminescence conversion layer 4 are treated with luminescence material 6. As noted by the Office Action in Column 14, lines 29-40, the luminescence conversion encapsulation 5 and luminescence conversion layer 4 "have light-diffusion particles, advantageously so-called diffusers. Examples of such diffusers are mineral fillers in particular CaF_2, TiO_2, SiO_2, $CaCO_3$, or $BaSO_4$ or else organic pigments. These materials can be added in a similar manner to the above-mentioned plastics."

Thus, the silicon oxide with the light-diffusion particles is a conversion layer and not a protective layer which transmits light without conversion. If there is not a requirement for converting the light from the semiconductor, the layers 4 or 5 would not be applied in Reeh et al.

Neither the Office Action nor the references teach the presence of an appropriate material which a) acts as a protective layer against ozone deterioration without conversion of the light of Claims 1 and 8, b) a protective coating on and protecting the window portion from deterioration without conversion of the light of Claim 20, or c) a protective coating on the plastic layer selected from the group of silicon oxide and aluminum nitrate. The inclusion of silicon oxide as a light diffuser in the epoxy housing of the light-emitting diode to diffuse light is not a teaching of a package having a protective layer for an optical detector without conversion of the light as described in Claims 1, 8, 15 and 20.

Upon review of the above arguments, it will be evident that claims 1-20 are allowable over the art of record and thus passage of this case to issue is hereby requested. The present amendment does not raise new issues, does not does not require a new search and places the application in condition for allowance.

It is respectfully requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response and shortages in any fees be charged, or overpayment in any fees be credited, to the Account of Barnes & Thornburg, Deposit Account No. 02-1010 (33851/41804).

Respectfully submitted,

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Enclosure

CLAIM SUMMARY DOCUMENT

1. (Currently amended) A package for an optical detector comprising:

a plastic window portion of the housing; and

a protective coating on the window portion permitting transmission of light of a wavelength of around 400 nanometers through the window portion without conversion while protecting the window portion from deterioration by ozone which is produced by the light of a wavelength of around 400 nanometers.

2. (Original) The package of Claim 1, wherein the plastic window is clear epoxy mold compound.

3. (Original) The package of Claim 1, wherein the protective coating is one of silicone oxide and aluminum nitrate.

4. (Original) The package of Claim 1, wherein the protective coating has a thickness in the range of ¼ to ½ of the wavelength of the light.

5. (Original) The package of Claim 1, including an optical detector in the package.

6. (Original) The package of Claim 5, wherein the package and optical detector are an optical reader in an optical storage system.

7. (Original) The package of Claim 1, wherein the light is in the range of around 400 to 780 nanometers.

8. (Currently amended) A package for an optical detector comprising:

a plastic window portion of the housing; and

means on the window portion permitting transmission of light of a wavelength of around 400 nanometers through the window portion without conversion while protecting the window portion from deterioration by ozone which is produced by the light of a wavelength of around 400 nanometers.

9. (Original) The package of Claim 8, wherein the plastic window is clear epoxy molding compound.

10. (Original) The package of Claim 8, wherein the means is one of silicon oxide and aluminum nitrate.

11. (Original) The package of Claim 8, wherein the means has a thickness in the range of ¼ to ½ of the wavelength of the light.

12. (Original) The package of Claim 8, including an optical detector in the package.

13. (Original) The package of Claim 12, wherein the package and optical detector are an optical reader in an optical storage system.

14. (Original) The package of Claim 8, wherein the light is in the range of around 400 to 780 nanometers.

15. (Currently amended) An integrated circuit comprising:

a semiconductor chip including a light sensitive device;

a transparent plastic layer over the light sensitive device; and

a protective coating on the plastic layer selected from silicon oxide and aluminum nitrate which permits transmission of light without conversion.

16. (Previously Presented) The integrated circuit of Claim 15, wherein the protective coating has a thickness in the range of ¼ to ½ of the wavelength of the light to be received.

17. (Previously Presented) The integrated circuit of Claim 15, wherein the light sensitive device is an optical detector in a package.

18. (Previously Presented) The integrated circuit of Claim 18, wherein the package and optical detector are an optical reader in an optical storage system.

19. (Previously Presented) The integrated circuit of Claim 15, wherein the light to be received is in the range of around 400 to 780 nanometers.

20. (Currently amended) A package for an optical detector comprising:

a plastic window portion of the housing; and

a protective coating on the window portion permitting transmission of light of a wavelength of around 400 nanometers through the window portion without conversion while protecting the window portion from deterioration.